

BIBLIOGRAPHICAL NOTICES.

ART. XV.—*Transactions of American Medical Societies*:—

1. *Transactions of the Ninth Annual Meeting of the Ohio State Medical Society, held in the City of Cincinnati, June 6th, 1854*, 8vo. p. 172.
2. *The Proceedings and Reports of the Medical and Chirurgical Faculty of Maryland, Incorporated in 1799, at its Annual Session, in June, and Special Session in September, 1854, in the City of Baltimore*, 8vo. p. 82.
3. *The Transactions of the New York Academy of Medicine*. Vol. I. Part II. *Containing Hospital Hygiene, Illustrated*, by JOHN H. GRISCOM, M. D. 8vo. pp. 12.

The Transactions of the New York Academy of Medicine. Vol. I. Part III. *Containing A Report on Solidified Milk*, by the Standing Committee on Public Health and Legal Medicine. 8vo. pp. 12.

1. THE volume of *Transactions* of the Ohio State Medical Society at its session of 1854, comprises a number of reports and papers of a highly interesting character. One of them, the Prize Essay of Dr. M. B. Wright, of Cincinnati, on Difficult Labours and their Treatment, we have considered worthy of a special notice, and one more extended than it will be convenient for us to bestow upon the other portions of the *Transactions*—we have accordingly assigned it a separate place in our Bibliographs.

The valedictory address of Julius S. Taylor, M. D., after retiring from the chair, as President of the session of 1854, though of a somewhat discursive character, is replete with correct and noble sentiments. Its leading topic is the necessity of union of action, and perfect organization among physicians for the promotion of the character, interests, standing, and usefulness of the profession—the cultivation and advancement of medical science and literature, and the elevation of the standard of professional education. This topic is urged with an earnestness and zeal becoming its importance.

The Ohio State Medical Society, Dr. Taylor informs us, was organized in the year 1846, by the association of twenty-five physicians.

“From that date,” he remarks, “the labours of its members have been devoted and zealous, and their efforts have been crowned with the happiest results, in the production of many reports and papers relating to our science, which are of great importance to the profession generally.

“Since its organization, numerous truly educated physicians have become members, so that at our last annual meeting we found enrolled three hundred and nineteen. This, however, is but a fraction of the many truly and correctly educated physicians of the State of Ohio. Some may, perhaps, object to becoming members of this Society from the fact, that the results of our labours are yet so small. We would say unto such, ‘Come in and assist us, as the harvest is yet large and the labourers few.’

“The results that will follow this organization, if it shall continue to increase in numbers until it has enrolled among its members the name of every physician within the State, that has the true Science of Medicine at heart, and who will be willing to lend his individual aid to the promotion of a general science of Medicine, will soon be found to present an interest so great, to create an emulating influence so profound, an education so perfect, a friendly intercourse so extended, a professional harmony so complete, and so general a desire to aid each other in all that shall tend in the least to advance our cause—the cause of legitimate medicine—that the most skeptical mind will soon be obliged to acknowledge that our cause is just and our objects attainable.

“To accomplish a result so desirable—will require, certainly, a continued

labour; a correct deportment in all professional etiquette; a fixed determination in every member to look to the interest of all as to that of his own. These, however, are but small requirements, and I have no doubt but they can and will be lived up to by all of us with cheerfulness and fidelity. If such shall be the case, as a Society, we have nothing to fear; our cause will be carried onward and upward, until it shall be crowned with the most perfect triumph."

The importance and necessity of organization among all the members of the medical profession, in district, county, and State societies; and the concentration of these local organizations, by a justly apportioned and properly appointed delegation in the National Association—having the same great objects in view as are set forth in the constitution of the State Medical Society of Ohio; mutual recognition and fellowship, the maintenance of union, harmony, and good government among its members, the cultivation and advancement of medical science, and the elevation of the standard of medical education—cannot be too frequently, nor too earnestly urged upon physicians. They who stand aloof from these organizations, or view them with a distrustful and jealous eye, if they have no sinister ends to answer by keeping themselves apart from their brethren, no selfish purposes to be accomplished that would not comport with the requirements of the code of ethics of the profession—if their desire is to base their success only on their characters as educated, intelligent, and honourable practitioners of the healing art, do a wrong to themselves as well as to the entire body of the profession of which they claim to be legitimate members, by refusing to identify themselves with "the common-weal," and lending their personal aid and influence towards its maintenance and promotion. With the elevation and aggrandizement of the entire profession must necessarily be connected the promotion of their individual influence and interests.

A report is presented by the Committee on Medical Ethics through its chairman, Dr. John Dawson. This is a pertinent, and well drawn up report. The committee, as its name imports, has imposed upon it the duty of making known to the society the moral standing of the profession throughout the State. This delicate task the committee have performed with a good deal of tact. By confining themselves, for the most part, to generalities, they have avoided offence to individuals, while by the judicious remarks and suggestions they have thrown out as to the most prominent derelictions of the code of ethics of which the physicians of Ohio have been guilty, and the evils to the profession thence resulting, they will have effected more good, probably, than if they had made more specific charges and brought them home in direct terms to individuals.

After quoting the 1st section of Article I., of the second chapter of the Code of Ethics, Dr. Dawson very pertinently remarks:—

"A doctrine very clearly set forth in this section, is, that the Profession of Medicine has a *character*, which is the property, not of a single member, or of the members of any particular region, but of the Faculty of the whole country. This character is the result of the labours of the upright in heart and the self-sacrificing for centuries; and as a consequence, it is no wonder that there are many to be found who venerate it, and exert their best abilities to maintain its dignity and honour.

"The introduction of an individual into the Medical Profession consists in nothing more nor less than the clothing of him with the character of the profession, and in imparting to him the right to exercise everything pertaining to it, for the good of society and of himself. The possession of such a treasure, together with the rights pertaining to it, must necessarily imply on the part of the individual thus invested, certain obligations, for without the existence of these, the relation would be imperfect. These obligations, among other things, require of him that he shall exert himself in every reasonable manner, and on all proper occasions to maintain the portion of professional reputation intrusted to his care; and that he shall also add to the common stock. For, it has been in this way, and in this way alone, that our common character has been built up—has been formed."

Among the derelictions of the Code of Ethics by certain of the physicians of Ohio, noticed in the report before us, is that of "speaking evil of each other."

"Our conversation," says Dr. Dawson, "about each other, when surrounded by the circumstances of rivalry in practice or in teaching, too often wants candour, liberality, and dignity. Old men are denied the veneration and respect due to their years and services; younger ones, who happen to be prominent, are criticized, persecuted, and occasionally slandered."

Another violation of ethics referred to in the report, is the mean attempt on the part of physicians, when called into consultation with younger and less prominent members of the profession, to weaken confidence in the medical knowledge and skill of the attending physician, with the view of attracting to themselves the future patronage of the family and friends of the patient.

"Impressed," says Dr. Dawson, "with the belief that the value of consultations most frequently consists in inspiring confidence in the physician having charge of the case, and assisting him as one mariner would another that had been tossed about by contrary winds, to keep his latitude and longitude right, until securely anchored in the port of safety, we cannot avoid suggesting the propriety of a review and revision of the whole subject. Consultations cannot be dispensed with without incalculable detriment to the sick, saying nothing about their value, when honourably conducted, to the profession. But we repeat, that it is the testimony of physicians all over the State, that they are diminishing in frequency; that many of the older physicians are avoiding them as useless, while the younger ones, are complaining that they seldom ever get through with them without being injured. To us, the existence of such facts is everything else than agreeable, and of course our only object in alluding to them, is, that our Society may look them in the face, and make an effort at their correction."

It is but proper to state that while the Committee on Ethics have considered it their duty to point out the existence of such deviations from the path of professional rectitude as have been just referred to, they bear cheerful testimony to the honourable character and conduct of "the great mass of the quiet and working portion" of the physicians of Ohio.

"In looking over our State," they remark, "and taking an imperfect survey of our physicians, and the manner in which they are demeaning themselves to the profession and to the people, we see much to excite admiration and gratitude. Labouring for less pecuniary reward, and at greater sacrifices of leisure and all the conveniences and comforts of life, than what in these times pertains to any other kind of business, they seem, nevertheless, as a general rule, to be conducting themselves very creditably, so far as an honest and faithful observance of the essential rules of ethics are concerned, while, at the same time, they are performing their duties to the people, frequently under circumstances of danger, with alacrity."

As a subject following within the range of ethics, and certainly of no slight importance, the committee notice the insufficient compensation too generally accorded to the physician for his professional services.

"To some extent," they observe, "this has always been the case, but at the present, it is eminently so. Every department of labour or service has exacted from the community increased rates of remuneration, while the services of the physician, his deprivations and sacrifices, have experienced, so far as increase of compensation is concerned, no change. Indeed, we are not sure but that the reverse is true. Physician's bills, from all that we can learn, are now paid off with less money, and more reluctance than they were a quarter of a century since. Many of our best educated young physicians find out, on entering the profession, that the compensation for their services, even if they succeed to a reasonable amount of business, is less than what can be obtained in many of the ordinary pursuits of life, and, as a consequence, they abandon the profession. Many, too, who have laboured in the ranks of the profession for years, find out at last that they are failing to secure the means necessary to sustain the infirmities of life, and in disgust turn their attention to other pursuits."

The small pecuniary return which physicians generally receive for the services they render—the impossibility, excepting under circumstances of rare occurrence, to lay by from the legitimate income of the profession any provision for the declining years of life, have induced more than one, who might

otherwise never have been tempted to do wrong, to resort to sinister and unworthy means of increasing their practice and augmenting their fees; or even boldly to break faith with their brethren by entering openly the regular ranks of empiricism and imposture.

If the public would secure for their service a well educated and experienced body of medical practitioners, upon whom they can depend, with full confidence, when disease assails them and their lives are endangered, they must be prepared to afford a compensation more in proportion to the value of the services they require of the physician; one better calculated to place him beyond the fear of want, and to relieve his mind from the harassing cares thence engendered, than they are now willing to do.

Have the profession within their reach any means to raise their compensation to a more equitable footing?

"Heretofore," says Dr. Dawson, "reliance has been placed upon the getting up of fee bills. Badly these have worked in most places where they have been tried. Too frequently the people have looked upon them as combinations to extort exorbitant charges, and while it is humiliating to acknowledge it, it is a fact that, too often, they have had their prejudices strengthened by the testimony of some unworthy member of the profession, one such being, unfortunately, to be found in almost every neighbourhood, who, by uniting in the clamour, is in hopes of obtaining popular favour and increased patronage. In view of this state of things, and of the propriety of doing something, no measure seems to us more likely to be attended with good results than a general movement on the part of the older physicians, those well established in the confidence of the community. Let them, by concert of action, take the proper ground in relation to the matter and maintain it, and the work is done. What they do is generally regarded as right, should it even interfere with the usages of the purse. They owe it to themselves, and to the profession to lead off in a measure so necessary at the present time, and one that unless carried out will require that our profession shall frequently be united with some other occupation in order that the means of a reasonable support shall be secured."

In the conclusion of their report, the committee briefly animadvert on the general standing of the profession, at the present moment, in the estimation of the public.

Like many of the things to which they previously allude, the public estimate of the medical profession is, they confess, not what most of us desire.

The cunning subterfuge, the impudent pretension, the total disregard to truth, the mean truckling to public prejudice and to popular errors which distinguish the bold and industrious opposition to scientific medicine of the vast host that muster in the ranks of the irregulars, whose only aim is gain, has had the effect of destroying, to a very great extent, the confidence in it and its legitimate practitioners, of large portions of different communities.

"It were well," remark the committee, "if this injurious influence was exerted only by the unwary and ignorant. Then we could look forward with some hope to the changes which the schoolmaster is making upon the race, as the era of deliverance from the trouble and annoyance. But how frequent and how common is it to see those communities, that we have been wont to regard as the most intelligent, taking the foremost rank in the patronage of the most transparent humbugs of the day. And, what is still worse, many of our distinguished men, those intrusted with the care of church or of State, and who enjoy a large portion of public confidence, not only seem an easy prey to the mountebank, but, when occasion requires it, are ready to aid, by their personal or official influence, in almost anything that shall detract from the character and claims of legitimate medicine, scientifically studied and scientifically practised.

"Besides the operation of causes *external*, we have those of an *internal* character, the influences of which are decidedly more fatal. To some of these we have already alluded in another connection, and only notice them here to increase attention to them, as our worst enemy. It is an old maxim that teaches the doctrine, that if we would have others respect us, we must respect ourselves. We have seen enough to convince us all, that, although our existence

as a faculty is indispensable to the welfare of humanity, still we cannot rely on the claim of utility alone, as the means of securing confidence, and of giving us popularity. To amenity of manners, and straightforward, upright conduct; to a disposition to treat each other, under all the circumstances of rivalry, as gentlemen, as brethren; to the habit, in all our connections, of avoiding contumelious or sarcastic remarks in relation to each other; to union among ourselves, and to industry in cultivating every department of nature and art available in the management of physical suffering and infirmity, we may look with confidence as being the only means of placing us in a position to command the respect and influence to which we are so justly entitled."

The prize essay of Dr. Wright on Difficult Labours, which follows the report on medical ethics we shall notice in another place, in the present number of our Journal.

The paper next in order is by Dr. L. M. Lawson, formerly of Cincinnati. Its subject is Practical Observations on the Diagnosis of Phthisis Pulmonalis.

The author presents a very fair, succinct view of the subject, which may be read with profit, especially by the younger members of the profession. In its more advanced stages, tuberculosis of the lungs presents no difficulty in its diagnosis to the well-instructed practitioner. In the very commencement of the disease, however, in what may be termed its formative stage—a period when a correct diagnosis is of the greatest importance—to arrive at a certain judgment requires a careful consideration of all the vital or rational symptoms, and of the local physical signs indicative of the deposition of tubercular matter in the pulmonary tissues. The one without the other is insufficient to render the diagnosis clear and positivo.

Dr. Lawson, from his own observations and experience, and the experience of physicians generally throughout the Western States, is irresistibly led to the conclusion that consumption is decidedly on the increase throughout that portion of the United States. "It has been observed," he remarks, "in many localities, that tubercular disease of the lungs, although formerly rare, is now becoming quite common, and those observations apply to so many districts of country, that no doubt can remain on the subject."

Dr. Lawson also notices, as an interesting fact, that there is a relationship, in point of time at least, between the increase of *typhoid fever* and consumption. He is not prepared to assert that there exists any direct and immediate connection between the causes which produce these two affections. He admits that their simultaneous increase may be accidental, or produced by different causes.

"But," he adds, "while this may be true, we cannot altogether disregard several important facts, which appear to favour the affirmative view of the question. At first, it is a pretty well established law, that there exists some degree of antagonism between *miasm* and pulmonary consumption, and that tubercular disease of the lungs is comparatively rare in paludal districts. And the same remark is true in reference to typhoid fever. So long as our regular miasmatic fevers prevail, typhoid fever is seldom witnessed; but as the former subside, the latter increases. It appears evident, therefore, that in proportion as the miasmatic influence subsides, typhoid fever and pulmonary consumption increase; and the suggestion that there may be some possible connection between their causes, is somewhat strengthened by the observation that the development of tubercle not unfrequently follows a protracted attack of typhoid fever. Louis met with such a result in a number of cases, and Dr. Copland regards consumption as one of the sequelæ of typhus. It has been alleged, also, that the product of typhus and tubercle are analogous, though of this there is no decisive evidence. It is proper to add, however, that Andral came to a different conclusion, and supposed typhus fever to be seldom followed by consumption. But, whatever may be the relationship of these affections, we know at least one important and interesting fact, namely, that they have increased in the same districts, and apparently under similar influences, and that they are both kept in abeyance by miasmatic influence."

In our investigation of the etiology of tuberculosis, which has been somewhat close and extended, we have not been able to satisfy ourselves that the

supposed antagonism between a miasmatic influence and the production of tubercle has any foundation in truth. It is very certain that tubercular disease of the lungs is by no means of infrequent occurrence in what are termed miasmatic districts of country, and where diseases universally esteemed to be of miasmatic origin prevail as endemics. From among a very large amount of direct testimony in support of this fact, which might be adduced, we quote the following. It occurs in the report on the Epidemics of Tennessee and Kentucky, made to the American Medical Association at its session of 1853. The statement is by Dr. George R. Grant, of Memphis, Tenn.

"It is believed, and asserted by high authority, that phthisis pulmonalis is not only not so prevalent in malarial as in non-malarial regions, but also that, by a residence in localities confessedly abounding with malaria, the consumptive invalid might even hope and expect a radical cure. An inspection of the table herewith sent will show, as far as it goes, that facts are not in accordance with this opinion; that the disease is undeniably on the increase in Memphis, where malaria is almost as abundant as in the 'Pontine Marshes.' Nor is this all. An examination of the mortuary table not only shows that consumption is the only disease which has consigned victims to our cemeteries in every month of the past year, but it likewise informs us that precisely *one-half* of the 54 deaths reported to have died of it occurred from July to October, inclusive, the very season of the year when malaria is in most abundance, and is exerting its power to the fullest extent.

"No one will run the risk of making himself so justly subject to ridicule as to say that these are *strangers*, who have come hither to spend their *summers* on account of the healthfulness of the place."

The same gentleman, in the report on the epidemics of the same localities, made to the Association in 1854, uses the following emphatic language:—

"Will it not appear almost incredible that, as far south as the 35th degree of latitude, in a region notoriously subject to bowel complaints and to the prevalence of the paroxysmal fevers, two diseases of the lungs—*pneumonia and consumption*—should prove to be the cause of nearly one-fourth, or twenty-five per cent. of the mortality? It would scarcely be credited did not figures demonstrate the truth of the statement."

Add to this the testimony of Dr. Drake, who, in his work on the *Diseases of the Interior Valley of North America*, after a careful review of the whole subject, makes the general statement: "In those regions where periodical fevers prevail, consumption is, also, a prevalent disease."

It is not our intention to enter into a review of the practical diagnosis of pulmonary tuberculosis as laid down in the paper before us. It presents no prominent points for notice or criticism, and little that is not familiar to every well-instructed and experienced practitioner.

The general phenomena indicative of the first stage of tubercular deposit in the lungs described by Dr. Lawson are: 1. Emaciation; 2. Persistent dry cough; 3. Infra-clavicular depression; 4. Diminished expansion; 5. Dulness on percussion; 6. Increased vocal fremitus; 7. Altered respiratory murmur—weak, jerking, harsh, bronchial, prolonged expiration; 8. Dry crackling. The existence, he remarks, of these signs, or a fair proportion of them, may be regarded as positively indicative of tubercular deposits.

"The preceding observations refer," says Dr. L., "to ordinary crude tubercles, as they are deposited in masses; but there is another form, denominated *miliary tubercles*, which presents different and less distinct phenomena.

"Auscultators are by no means agreed as to the signs which indicate the presence of miliary or solid tubercles, and it is generally admitted that no fixed and distinctive phenomena exist. Dr. Skoda declares, indeed, 'that there are no distinct signs by which we can with certainty diagnose the existence of acute miliary tubercles.' Dr. Walshe admits the difficulty of diagnosing miliary tubercles, but adds, that the real difficulty consists in distinguishing miliary phthisis from *typhoid fever*.

"My own observations on this subject have been made with much care, and I have been able, in a number of instances, to diagnosticate the existence of

miliary tubercles, which, unfortunately, was confirmed by *post-mortem* examinations.

"The characteristic signs, or those on which I chiefly rely, are, persistent dry cough; quick, but usually feeble pulse, with general febrile action; slight incompleteness of pulmonary crepitation or finely sub-crepitant rhonchus. Dulness is not appreciable, except in very advanced stages. The existence of the crepitus, extending to the base of the lungs, without the accompanying signs and symptoms of either pneumonia or bronchitis, is as characteristic of acute miliary tuberculosis as dry crackling is of tubercles in masses. The degree of the febrile movement, which is an exact measure of the acuteness of the disease, will vary with different cases, but it is nearly always greater than in the ordinary forms of consumption.

"It is altogether possible that there is a stage of incipency in this variety, in which there will be neither sufficient fever, embarrassed breathing, nor altered murmur, to enable us to make a diagnosis; but, when a little more advanced, I am satisfied that in the phenomena which I have mentioned will usually be found their concomitants."

There is much truth in the following remarks of Dr. Lawson—they deserve the serious consideration of every practitioner. It is in the removal of the diathesis, the morbid condition of the organism upon which the tendency to the deposition of tubercular matter in the tissues of the body depends—the *tubercular predisposition*, as it has been termed—that our success in the cure of consumption will depend. We have, heretofore, too much neglected this "beginning of the evil," and have almost invariably directed our efforts to arrest the results of the disease, the morbid deposit and the consequences resulting from its presence in important organs, rather than the disease itself.

"It is a melancholy fact," observes Dr. L., "that, thus far, consumption has almost defied the skill of the physician and the potency of medicines. No climate, age, or condition is exempt from its insidious ravages; the robust and athletic man, the mere infant, young and old, though not equally liable, are, nevertheless, but too often victims of the disease. Bred in the very composition of the tissues, bone and muscle, membrane and blood, all become contaminated, and finally decay and die, as the inscrutable disease spreads throughout the system. There is a period, however, when the disease consists, not in a morbid deposit, but in what has been and still is called a *diathesis*, and this is the period when our remedies may be most successfully employed, before a fatal disorganization takes place. This constitutional predisposition has been most erroneously and fatally called a *functional* condition, and not actual *disease*; and until that error is corrected and a different doctrine embraced, I greatly fear we shall have but little more success in the cure of phthisis than our predecessors. That the condition which has been called the tuberculous constitution or diathesis is something more than a *functional* disorder, is clearly proven by the analysis of the blood, the examination of the tissues, and the general physical conformation. Long anterior to the deposit of tubercles, the blood is found deficient in globules, hæmatin, and iron, with an excess of albumen and water, and altered or depraved fibrin. This, and but little more, exists during the first stage of tubercular deposits; and yet it is averred that this is *not disease*, but a mere *tendency* to it. The truth is, the tuberculous constitution is a positive disease, which is exhibited in a changed condition of the blood, and of many of the solid tissues.

"I do not deny the curability of consumption, especially in an early stage; on the contrary, there is, doubtless, a fair proportion of cases, treated judiciously and at an early period, and even pretty far advanced, radically cured, and others, for a time, suspended. But while this is true, we neglect too often the golden opportunity of doing good, by failing to recognize the constitutional derangement as positive disease, and thus wait for fatal organic lesions of a secondary character, before our agents are applied. The hope of the profession still seems to be that a great *specific* may yet be found capable of curing all cases, and in all stages; but the hope is as vain as the assumption is practically mischievous and fatal. Our country is now deluged with cod-liver oil, and the professional man is apt to conclude that he has done his whole duty

when this nauseous drug has been freely given. But I fear that experience is here again at fault. No modern practitioner can have more confidence in the cure of consumption with cod-liver oil than had Beddoes in the use of digitalis in that affection. But whatever may be the true merits of cod-liver oil, it is to be greatly feared that the present indiscriminate mode of employing it can hardly fail to be productive of as much harm as good, and that the mortality of consumption will not, in the slightest degree, be diminished by its introduction."

The paper of Dr. Lawson is followed by an interesting report on Surgery, by Dr. G. V. Dorsey, of Piqua. After some very judicious introductory remarks in reference to the causes which led to a separation between medicine and surgery, and on the importance of the study and practice of the two being combined, the reporter considers briefly the management of fractures and dislocations, with the treatment of the diseases of the bones and joints; the subject of amputations; injuries of the head; extirpation of tumours; wounds of the throat; permanent cure of hernia; the use of anæsthetics in surgical operations, etc. etc. On each of the subjects indicated, although all are treated with great conciseness, the remarks of the reporter are occasionally pertinent and of value, though not unfrequently of too loose and general a character to lead to any important practical results. The cases interspersed throughout the report will be read with interest.

We cannot agree with Dr. Dorsey in his defence of the propriety of inventors of surgical instruments securing to themselves *the profit* of their inventions by a patent, and we confess we have experienced both pain and mortification that so important and influential a body as the State Medical Society of Ohio, should, by a formal vote, declare "that it is not derogatory to medical dignity, or inconsistent with medical honour, for medical gentlemen to take out a patent-right for surgical or medical instruments."

The framers of our national code of ethics have, with great propriety, declared it to be "derogatory to professional character for a physician to hold a patent for any surgical instrument or medicine." There is no identity whatever between the copyright of a book and the patenting of a surgical instrument or medicine. In the first case, there is no restriction upon our use of the knowledge, the facts, and information contained in a copyright work; we have a right to make use of it in any manner we may think proper; we are at perfect liberty to apply it for our own advantage, or to communicate it to others, who are equally unrestrained in their employment of it. We are only prohibited from printing the work in which that information is contained. But not so with a patented instrument or medicine; we may be convinced of its usefulness, we may fully understand its construction, but under no emergency can we avail ourselves of it, or recommend others to do so, unless we have purchased the instrument or medicine of the proprietor, or, at least, the right to use, manufacture, and vend it. Independently, therefore, of circumscribing within certain limits a useful invention in surgery, or an important discovery in therapeutics, the *profits* demanded as a remuneration by the inventor will often prove a barrier to the true value of the instrument or medicine being tested by repeated experimental trials. We have said nothing of the inconsistency of a private appropriation, solely for self-aggrandizement, of any improvement in surgery or medicine calculated to relieve human suffering or save human life, with that beneficence and liberality which should ever be the distinguishing characteristic of our profession.

The report concludes with some pertinent remarks on the necessity of a combined effort to remove the impediments to practical anatomy originating in the fears and prejudices of the community.

A communication from Dr. G. Mendenhall, of Cincinnati, calls attention to some facts presented in an inaugural dissertation, presented to the Miami Medical College for the Degree of Doctor of Medicine, by E. T. Baily, of Emmettsville, Indiana, on nitric acid as a remedy for intermittent fever.

Dr. Baily states that he has treated over ninety cases of intermittent fever with the nitric acid, with remarkable success; all recovering promptly except ten; and, in all of these unsuccessful cases, the remedy was discontinued

contrary to directions. Of the whole number of cases, fifteen were of the tertian type, and seventy-five of the quotidian. In fifty cases, there was no return of the chill after commencing the use of the acid. In the others, rarely more than one paroxysm occurred, and in no case a third. When a paroxysm occurred after taking the medicine, it was in every case diminished in intensity and duration.

Dr. B.'s mode of proceeding is to give from five to eight drops of the commercial nitric acid, properly diluted, once in six hours, without regard to intermissions or exacerbations. Cathartics and alteratives may be necessary, for the purpose of changing certain conditions of the system; but, so far as the arrest of the paroxysms is concerned, the acid may be given without any preparatory treatment.

The next paper is on the Etiology and Curability of Phthisis Pulmonalis, by Dr. C. G. Comegys, of Cincinnati. Though a mere outline, in which the several questions embraced in the general subjects of which it treats are rather hinted at than discussed, and containing little, if anything, strictly original, the paper is nevertheless a deeply interesting one. The views of the author are in the main correct, and although opposed, in many particulars, to what have been esteemed well-established facts, they will be found to be, very generally, borne out by recent and more accurate observations.

"Phthisis pulmonalis," Dr. C. remarks, "is now known to be a common disease in all civilized nations, and the remark may be extended, almost as fully, to embrace the people, whether savage or civilized, in all parts of the habitable globe; but it does not prevail to the same extent in all countries; and the most secure residences seem to be those so far north as to escape the greatest vicissitudes in the seasons. Thus in Stockholm, the deaths from this disease only amount to one-fifteenth of all; while in London, Paris, and Berlin, they amount to almost one-fifth. In some of the German cities, the proportion is also much larger than in St. Petersburg. Many writers still hold out the idea that warm climates are comparatively exempt from this disease; but since statistical research has been made, the deaths from phthisis have been found to be almost as common as in higher latitudes. Thus, for the eastern continent, the rate is almost as great at Rome, Naples, Madrid, Lisbon, Marseilles, Malta, the Ionian Isles, and the north of Africa, as it is in England.

"From the researches made on our own continent, the same result is established; in fact, according to the statistics collected by the late Professor Drako from the reports of the British army, and the sanitary publications of some of the cities on our seaboard, the proportion of deaths from phthisis is greater in the south than in the north. These statistics relate to the West Indies, as well as to the British possessions further north. Statistics collected in Brazil and Martinique, by Drs. Rufz, Jobins, and Sigaud, show that it is as murderous in those places as in Europe or North America."

In the Island of Cuba, we may add, the deaths from phthisis for the city of Havana constitute considerably more than one-fourth of the entire mortality, and for the rural districts upwards of twelve per cent. In the city of New Orleans, La., the deaths from phthisis constitute 9.51 per cent. of the entire mortality. The deaths from the disease in neither the Island of Cuba nor in New Orleans are chiefly confined to strangers who visit these places for the recovery of their health, but occur in a very large proportion among the native population.

Inherited tendency to tuberculosis has been supposed the chief, almost the only, predisposing cause of the disease. But, while the hereditary character of the disease is well established, we nevertheless admit, with Dr. C., that the children of tubercular parents are by no means necessarily the subjects of phthisis. We have in numerous instances known them to entirely escape an attack; while, on the other hand, very many have been its victims in whose families, for many generations back, on the side of neither the male nor female progenitors has the disease ever occurred.

Lebert gives the result of his observations in 132 diseased families, and shows that in 87, or two-thirds, no hereditary influence could be traced. In

only about one-tenth of the cases occurring in his practice could Louis trace it to inheritance, Piorry in about one twenty-third, and Rilliet and Barthez in one-seventh. With these positive evidences before us, we are almost inclined to subscribe to the opinion of Dr. Comegys, that "death from phthisis, as an inherited disease, is the exception and not the rule."

Dr. C. very correctly remarks that "a single bad hygienic condition cannot be regarded as sufficient to the production of tubercles; it is only an association of several conditions that exerts a real influence." We may remark that the production of the tubercular dyscrasy is not the result of any rapid action of morbid causes, but of the slow and continued action of those influences which have a tendency to gradually impair the vital energies of the system—impair digestion and impede regular and healthy hematosis and nutrition.

Dr. Comegys states that "the most favourable external hygienic circumstances" will not prevent the development of tubercles. Not always, it is true; moral causes, long-continued and exhausting diseases, may slowly impair the organic functions and give rise to tubercles; but the influence of even these causes in the production of tubercular disease may be, to a very considerable extent, averted by the most favourable external hygienic circumstances.

"The influence of the seasons on the production of tubercles," Dr. C. remarks, and with great truth, "has been exaggerated more by hypothesis than by observation."

"The special influence of professions or occupations in the production of tubercles," says Dr. C., "has not been well established."

We believe this assertion will not be borne out by accurate statistics. Indoor occupations of a purely sedentary character, especially those demanding a constant constrained position of the body; occupations, also, which, besides being sedentary, call for prolonged and intense mental application, are confessedly more liable to produce tubercular disease than such as are carried on in the open air, and which allow the free and unconstrained exercise of the muscles generally; or which occupy and interest the mind without overtasking it—even when every other hygienic condition is, in all of them, equally favourable.

After endeavouring to show, what nearly all pathologists now admit, that the etiology of phthisis pulmonalis is to be sought in "the imperfect digestion and elaboration of the elements of the food consumed;" in other words, in disordered digestion, assimilation, and nutrition—Dr. C. infers, and very correctly, "that the number of cases that may be successfully treated, and the diatheses that may be combated, will depend largely upon the period at which the treatment is commenced, and the amount of control obtained in the direction of the functions of digestion and assimilation, and of the external conditions that surround our patients."

The paper next in order is on the Pathology, Symptomatology, &c. of Latent Pneumonia, by Dr. S. G. Armor, of Cincinnati.

This form of pneumonia is asserted to be of frequent occurrence in the malarious districts of the West, and being unattended in its early stages by the more prominent symptoms of pneumonic inflammation, making its approaches silently and gradually, its presence is often unsuspected by either patient or physician until the work of destruction is accomplished. There is little constitutional disturbance, so little that the patient may often pursue his usual occupations.

"If the disease has made considerable progress," says Dr. A., "on being interrogated, the patient may complain of a troublesome, but not painful cough, with a somewhat viscid and scanty expectoration, the tongue moist and slightly furred, appetite unimpaired, respiration hurried, inability to take exercise, and previously to hectic symptoms, there will be found a marked disparity between the respiration and the circulation."

"In latent pneumonia, congestion always predominates over the determination of blood. Hence its marked asthenic character." "There is little or no pain; fever and other signs of increased action are comparatively slight; nor does it tend to such speedy results as the acute variety."

Latent pneumonia has the same stages as the ordinary disease; they occur, however, more slowly, and are attended with less prominent symptoms. The

true crepitant râle, so constantly present in the stage of engorgement of active pneumonia, and even heard in the local or lobular variety, is rarely detected; if heard at all, it is as a muco-crepitant râle.

Latent pneumonia is usually seated in the inferior portion of the left lung, extending from below upwards.

Gangrene of the lungs is an occasional termination of the disease, especially when it occurs in connection with an alteration of the blood. Derangement of the liver, followed by jaundice, is a frequent complication.

We present, in his own words, Dr. Armor's account of the treatment of latent pneumonia.

"Caution has to be exercised in the use of all remedies which are calculated to depress the vital forces. Beef tea and quinia are oftener indicated than bloodletting and antimony. The patient's strength must be supported, the local hyperæmia must be overcome; and, although to accomplish this it may be necessary, in some cases, to abstract blood locally by means of cups, it may be equally necessary, at the same moment, to husband the patient's strength by the administration of tonics."

In latent pneumonia, it is all-important to guard against the occurrence of bronchitis by placing the patient in an apartment of a moderately warm and uniform temperature, and guarding against sudden exposure to cold or drafts of cool air.

"In the more advanced stages, the moist, coarse râles are frequently heard over a large extent of surface. If, in connection with this physical symptom, the pulse be feeble, the skin dusky, cold, and relaxed, we should lose no time before putting the patient on the use of some of the stimulating expectorants, and, perhaps, none equal in importance the senega and sesqui-carbonate of ammonia. This combination appears to be peculiarly adapted to those cases in which the secretion into the tubes is considerable, and the patient expectorates with difficulty."

"The sesqui-carbonate of ammonia, wine, bark, and the nutritious animal broths, well seasoned with the chloride of sodium, often exercise a marked control over the local disease."

Dr. Armor considers the effects of blisters to the chest as more certain in latent than in ordinary pneumonia; and that their use may be resorted to more early. They should, he thinks, be small in size, and frequently repeated; never being kept on long enough to produce exhausting suppuration. Counter-irritation, from the use of strong acetic acid and turpentine, he notices as also an important remedy.

"Any indication of periodicity should be promptly met by the use of the *sulphate of quinia*. In malarious districts, the powers of this remedy are often singularly displayed in the treatment of this form of pneumonia."

Dr. R. Thompson presents a drawing and description of two instruments, a "gouge bone cutting forceps," and "a hand-drill or bone perforator." The first he considers of great convenience and advantage in that class of operations on bones which has hitherto required the employment of the mallet and chisel, gouge, trephine, chain-saw, etc.; and the second he offers as very useful in many cases. The peculiarity of these instruments cannot be understood without a reference to the drawings by which the descriptions of them are accompanied.

2. The reports of the Medical and Chirurgical Faculty of Maryland are only two in number—one on surgery, by a committee, of which Dr. Christopher Johnston is chairman; and one on medical chemistry, by a committee, of which Dr. Charles Frick is chairman. They are both of a very high order, presenting a very full and very able digest of the present state of knowledge in reference to several important questions in the respective departments of medical science of which they treat.

The report on Surgery comprises observations on the *microscope* in relation to *diagnosis* and to *classification* in certain diseases; the *union of fractured bone*, and the treatment of *fractures*; *aneurism* and its treatment; and the

pathology and curative indications in certain *ophthalmic diseases*, together with some modern instruments to assist in their detection, etc.

The report is an extremely interesting one, and may be read with profit by every surgical practitioner; especially by those whose locations are remote from the great centres where the progress in each department of surgical medicine becomes first known and duly appreciated. The interest and value of the report in question do not consist in its embodying a series of original observations in reference to either of the topics embraced in it, but in the faithful, clear, and, at the same time, concise summary it presents of the recorded facts and deductions of the authorities of the profession.

It would be impossible to present any useful analysis of either of the reports presented at the last session of the Medical and Chirurgical Faculty of Maryland; and from that on surgery we do not think it necessary to make any extracts.

The report on Medical Chemistry is restricted to the *chemistry* and *pathology* of the urine.

The important physiological fact of the manufacture of sugar by the kidneys, as shown by the beautiful experiments of M. Bernard, and its relation to the pathology of diabetes is first considered. Reference is also made to the experiments of Valentin, of Bern, in which sugar was detected in the liver, blood, and watery contents of the stomach of marmots in whom hybernation had existed over two months; as well as to the experiments of Henle, to show that "the nervous reflex action, upon which depends the secretion of sugar by the liver, is generated in the liver itself, by the stimulating power of the blood of the portal vein."

The report, in noticing Regnoso's assertion that, from his observations, he has found the urine of most aged persons, as well as those suffering under imperfect respiration, to contain sugar, remarks, "this statement requires confirmation; we ourselves have not been able to verify it, and, with one exception (*Chemist*, April, 1853, p. 304), we are not aware that any one else has done so." He has lately declared, in addition, that the urine of epileptics, after the attack, also contains sugar. The report before us says, that in two cases in which its authors have examined the urine by the means indicated by Regnoso, "they failed both times to detect it, so that, however general the fact may be, it certainly is not universal, as he concludes."

The report before us presents a very able summary of the recent facts developed in relation to the leading subjects embraced under the general head of medical chemistry, including in that term both physiological and pathological chemistry. The report concludes with an account of some interesting experiments, "undertaken with a view of showing the influence of different remedies upon the urinary secretion."

The experiments were performed on the inmates of the Maryland Penitentiary Hospital, during a period of nearly ten months.

"Each inmate admitted to the hospital was subjected to the treatment that seemed appropriate to his disease, and without reference to the investigations that were being pursued. Each was provided, at his bedside, with a clean glass vessel of sufficient size, in which he was directed to pass all the urine he voided. Daily measurements of these amounts were taken, the specific quantity ascertained, and, after recording them, the particular remedy, or combination of remedies, with the doses, was set opposite to each name. Subsequently, from these tables the amount of solids was calculated, and the deductions then made which are herein embodied. In this way nearly 2,000 separate observations were collected with very little trouble; but as, in many instances, the treatment was of too complicated a nature, or of too short duration, to allow of any proper conclusions being drawn, a large number of these were rejected, and the tables here presented are made up of about 1,200 separate observations. We might remark here that the largest quantity of urine and solids the tables record, is 100 ounces, containing 2,800 grs., more than three times the average amount. And that in no single instance of the 2,000 did we ever detect sugar, although a very large number were examined with this view—a result entirely opposed to the statements of Regnoso.

"The conclusions here presented are average results obtained from the examination of a large number of cases taking the same remedy, without reference to the disease under which they were labouring. In but one or two of the averages were a less number than 50 taken, and in one more than 100. It may be objected that the influence of disease, a most important consideration, is here omitted. But this omission is almost unavoidable, and from the fact that the different diseases bear nearly the same proportion to each individual remedy, this element becomes in a measure equalized, and does not interfere with the correctness of the conclusions, as might at first be anticipated.

"We might also remark that the amount of solids, as deduced from the specific gravity, is not exactly correct, but still sufficiently so for comparison; and that the amount of solids, as well as of fluid, is less than it ought to be in every instance, as no account could be taken of the quantity passed while at stool.

"The quantity of urine in a healthy man varies from 20 to 60 ounces, containing from 400 to 1,600 grains in the 24 hours, and often much beyond these limits. The cause of these variations are partly internal, and partly external—some transitory, others of a longer duration—some simple, and others complicated. Of these, the influence of drink is most remarkable. It may increase the secretion, within four hours, to three or even ten times its normal amount. The quantity voided at night is generally the least, while in the morning it increases, and in the afternoon or evening attains its maximum. As regards the quantity secreted in diseases, it is found to be normal in most chronic affections unattended with fever. It does not often exceed the usual quantity, and is diminished in most diseases. This diminution, to the greatest degree, is found on an average in the acute fevers."

We present, in tabular form, the result of the experiments referred to—

Substances employed.	Quantity given.	Number of analyses.	Urine in ounces.	Solids in grains.
Sulph. quiniæ and sulph. ferri,	{ 3 grs. of first, and 1 of second,	48	57	1248
Juniper tea,	{ 4 oz. berries to a quart of water in the 24 hours.	39	56	1134
Prussiate of iron,	4 grs. 3 times daily,	52	52	1095
Sulphate of iron,	1 gr. 3 times daily,	53	53	992
Phosphat. ammoniæ and wine of colchicum,	{ 20 grs. of first, 15 drops of second.	42	42	936
Acetate of potass.	{ from $\frac{1}{2}$ drachm to $\frac{1}{2}$ ounce in one quart water daily.	110	40	926
Decoction of Peruvian bark,	{ 2 drachms to a quart of water, $\frac{1}{2}$ pint daily,	93	49	925
Wine of colchicum,	15 drops 3 times daily.	47	39	893
Gin,	{ 2 oz. in water, in divided doses, daily,	17	51	853
Whiskey,	in the same quantity.	22	47	842
Phosphate of ammonia,	10 grs. 4 times daily,	43	38 $\frac{1}{2}$	834
Mur. tinct. ferri,	45 drops daily,	48	52	810
Iodide of potass.	15 grs. daily,	63	41	809
Sulph. quiniæ,	12 grs. daily,	57	39	801
No medicine,	{ persons labouring under disease requiring no internal medication,	71	34	795
Phosphate of lime,	12 grs. daily,	19	36	792
Spir. nit. ether,	half drachm daily,	51	37	782
Strychnine and mur. tinct. ferri,	{ $\frac{1}{2}$ gr. of first and 15 drops of second, 3 times daily,	48	33	725
Cod-liver oil,	2 oz. daily,	63	38	720
Morphia,	$\frac{1}{2}$ gr. daily,	48	32	627
Strychnine,	$\frac{1}{2}$ gr. three times daily,	53	29	500

3. In the report on Hospital Hygiene, Dr. Griscom presents a striking illustration of the virulence of the morbid exhalation from the bodies of patients labouring under low forms of fevers, when such patients are congregated in hospitals, even when the wards of these are apparently not deficient in respect to size and elevation, nor absolutely defective in means for ventilation, as well as of the tenacity with which the poison thus generated adheres to the atmosphere and walls of the apartments where it was generated.

In the building attached to the New York Hospital, up to January, 1852, immigrants labouring under typhus fever had been received in considerable numbers, some to spend merely a night previously to their removal to the fever hospital on Staten Island, and others as permanent patients. This building would be regarded by almost any person who should visit it as possessing, in elevation, general situation, and internal arrangements, advantages superior to a great majority of buildings devoted to hospital purposes. In January, 1852, however, the atmosphere of the whole house seemed to have become thoroughly infected; patients with rheumatism, or other benign complaints, began to succumb to the power of the pervading miasm, even in some of the wards into which no typhus cases had been admitted.

"Notwithstanding that thorough cleanliness, and as free ventilation as possible, were maintained, and the immigrant cases were rigidly confined to their particular apartments, the difficulty increased to such a degree as at last to render necessary an entire change in the economy of the establishment with respect to this disease. At the suggestion of the visiting physicians, the Board of Governors, first, prohibited the reception of any more immigrant night cases; and secondly, a thorough purification of all the typhus wards was ordered. The number of patients was reduced, so as to allow one or two wards to be vacated, and successively the infected rooms were disinfected, and exposed to the external air night and day for several weeks, until the whole was renovated."

In this work of purification, four men, three masons and a laborer, were employed to cleanse the walls and ceilings, and whitewash them where necessary. "They wrought only in the wards which had been vacated, and then only after each had been thoroughly aired by open doors and windows. These men did not enter any of the wards occupied by the sick; they had no occasion, in going to and fro, to see any part of the premises but the large halls, the stairways, and the apartments they were at work in. They were engaged there one week. The labourer passed a great deal of his time in the open air, preparing and carrying materials for the others, and hence visited the building only occasionally, remaining but a short time in it, except when, being otherwise unoccupied, he aided the others a little at their work."

Within six days from the period when they finished their work at the hospital, three of these men were attacked with typhus fever, of whom two died. They were treated at their own homes, which are represented as having been comfortable residences, and they were all temperate and respectable persons.

In contrast to the foregoing, and as an evidence of the beneficial influence of free ventilation in disarming typhus fever of its infectious and malignant character, the following is related by Dr. G. :—

In the month of August, 1837, a number of ships with immigrant passengers arrived at Perth Amboy, from Liverpool and other ports, on board of which ship fever prevailed. There was no hospital or other accommodation in the town, in which the sick could be placed, and no person would admit them into private dwellings, fearing the infection of the fever. They could not be left on board the ships. An arrangement was made to land the sick passengers, and place them in an open wood, adjacent to a large spring of water, about a mile and a half from the town. Rough shanties were erected, two in number, thirty feet long, twenty feet wide, boarded on three sides about four feet up, covered with sails, and floored. Thirty-six patients were taken from on board ship with boats, landed as near the spring as they could be got, and then carried in wagons to the shanties, under the influence of a hot sun, in the month of August. Of the thirty-six landed, twelve were insensible, apparently in the last stage of ship fever, and not expected to survive twenty-four hours. The

day after landing, there was a heavy rain, and the shanties affording no protection with their "sail roofs," the sick were found the next morning wet, and their bedding, such as it was, drenched with the rain. It was replaced with such articles as could be collected from the charity of the inhabitants. The number at the encampment was increased by new subjects to the amount of eighty-two in all. On board of one of the ships, which was cleansed after landing the passengers, *four* of the crew were attacked with fever, and two died. Some of the nurses at the encampment were taken sick, but recovered. Of the whole number of the eighty-two passengers removed from the ships, *not one died*. Pure air, good water, and perhaps the rain—though only the first thirty-six were exposed to it—seem to have effected the cure. "The medical treatment," remarks Dr. C. M. Smith, who had charge of the patients, "was exceedingly simple, consisting, in the main, of an occasional laxative or enema, vegetable acids and bitters; wine was liberally administered, together with the free use of cold water, buttermilk, and animal broths." The four sailors, who sickened after the arrival of their vessel, were removed to the room of an ordinary dwelling-house; the medical treatment in their case was precisely similar, yet two of them died. Two of the patients suffered from carbuncle while convalescing. Dr. S. adds: "My opinion is that, had the eighty-two treated at the encampment been placed in a common hospital, many of them would also have fallen victims. I do not attribute their recovery so much to the remedies administered as to the circumstances in which they were placed; in other words, a good washing to begin with, and an abundance of fresh air."

Dr. Griscom regards the first of the cases just related as "presenting a type of the average hygienic character of hospitals in general *as they are*; the last a type of what they *should be*, in this respect, excepting, of course, the materials and style of structure.

"Regarded in its general aspect as a source of light and health," says Dr. G., "an ample supply of pure air, in conjunction with the immediate removal of secreted and exhaled impurities, beyond the possibility of a re-inhalation, is a subject of profound interest to all humanity; but to the practitioner of medicine it presents itself with increased force. There is imposed upon us a double obligation. The question should be constantly before our minds, whether we shall deny, or allow to be denied, to our patients, the use of oxygen in the fullest measure in which it can be found in the atmosphere? Whether, while searching our *materia medica* for the most appropriate remedies, according to our theories of disease and treatment, we will continue to overlook the most potent of all restoratives, that derived from Nature's own laboratory?"

"Let it never be forgotten for a moment that this agent—to procure which we have neither to dig into the earth, nor transport from foreign climes, nor distil from the alembic, nor refine in the crucible, but which is pressed upon us with a force and in a measure equalled only by the supreme benevolence which furnishes and unceasingly renews it; this agent, when left free to act its part, removes the effete poison from the blood, and imbues it with continual health and freshness, but when stifled and confined, whether intentionally or by accident, turns, like a viper, upon the arm that nourished it, and plants a deadly venom in its veins."

The report on Solidified Milk, though ostensibly emanating from the Committee on Public Health and Legal Medicine, is, we suspect, from the pen of the same gentleman to whom we are indebted for the preceding one on Hospital Hygiene.

Every means adapted to preserve for a length of time, and in a portable form, those alimentary substances necessary for the support of human life, or which add materially to his real comforts, especially such substances as quickly deteriorate, either by the action upon them of external atmospherical influences or by the spontaneous reaction of their own elements, is a subject of deep interest. In the various circumstances in which man may be placed, it is possible for him to be removed for months and even years beyond those sources from which a supply can be obtained of the food necessary for his sustenance, in that unaltered condition upon which its palatableness and wholesome qualities mainly depend. It is conferring upon him, therefore, an essential benefit to supply

him with necessary food and alimentary luxuries in a form of concentration and durability in which their natural flavour and wholesome nutritious properties remain unimpaired.

"As an article of food, under all circumstances of life, civilized and barbarian, in infancy and in age, in sickness and in health, *milk* is at once a luxury and a necessity; and it is remarkable that, being such, it, of all the sources of man's sustenance, should be the most susceptible of spontaneous decomposition, and this not so much from the influence of the atmosphere or any other external agent upon it, as from its own innate tendency, arising from its complicated and peculiar organization; a few hours, and, in warm weather, even a few minutes, being sufficient to change its constituent character. Any method to preserve the integrity and nutritive qualities of milk, so that it may be available at any time as diet, must therefore, if successful, be regarded as among the most interesting and valuable of the gifts of science to humanity."

The committee, whose report is before us, state their belief, derived from a very thorough examination of the whole subject, that this most desirable object has been attained by a simple and ingenious process devised by Mr. S. J. Blatchford, of Dutchess County, N. Y., who manufactures and supplies for sale solidified milk, which the committee have ascertained to be the solid constituents of pure milk, combined with a little less, by weight, of white sugar.

"It contains," they assure us, "no other foreign substance." The various solids of the original fluid are preserved intact, even the butter globules being unbroken. It is readily and perfectly soluble in water, and when so dissolved in proper proportion, it is, in fact, milk, as it was secreted by the cow, with the sole exception of the sugar which accompanies it; and the only medicinal or culinary operations in which ordinary milk is required, and the solidified article cannot be used, are those in which sugar is inadmissible; on the other hand, whenever sugar is required in connection with milk, they are here found together.

"Blatchford's Solidified Milk comes to us mainly in the form of a tablet, covered with tin foil. It has a light yellow, slightly mottled appearance, is of a very firm texture, but yields readily to the knife or grater. Each tablet weighs a pound, and will make in solution five pints of rich milk. When pulverized, it is readily soluble in hot or tepid water, while cold water requires rather longer time, but the solution is perfect in either. The tepid solution approaches nearer the standard of natural milk. The only objection, besides that of the presence of sugar, which can be made to it, is an empyreumatic flavour somewhat similar to that of boiled milk, which it receives in the process of manufacture. This varies in degree, but it is much less distinct when the solution is made with cold than with hot water; and in the preparation of custards, puddings, arrowroot, wine whey, ice creams, &c., in all of which the committee have practically tested, it disappears. To many persons, this flavour is not objectionable, and with many others the palate soon becomes reconciled to it, and in a short time fails to recognize it. By contemplated improvements in the apparatus for manufacturing it, this objection is expected to be entirely obviated.

"A solution in cold water, allowed to stand sufficiently long, will exhibit a surface of rich cream, much more abundant than is found in the same quantity of milk carefully selected in the city; from this cream your committee have caused good butter to be made, from which all traces of sugar are easily washed away, showing that this substance is only mechanically, and not chemically, incorporated with the milk constituents. In solution, it does not acidify so soon as the milk of city consumption.

"Besides the hard tablet, the solidified milk is also furnished in a granular form, inclosed in cans; it is thus more convenient for use, and will doubtless keep sweet for many months, though probably more liable to change than in the other form."

D. F. C.